Patent claims:

1. An expression system for simultaneously expressing the nucleic acid sequences encoding the different subunits of a nitrile hydratase,
characterized in that
the expression system comprises in each case at least one plasmid containing at least one nucleic acid sequence encoding the respective subunit.

2. The expression system as claimed in claim 1,
characterized in that
it is present in *E. coli* as host.

3. The expression system as claimed in one or both of the preceding claims,
characterized in that
the expression of the nucleic acid sequences encoding the subunits is under the control of what is in each case the same promoter.

4. The expression system as claimed in claim 3,
characterized in that
the promoter is a T7 promoter.

5. The expression system as claimed in one or more of the preceding claims,
characterized in that
at least one nucleic acid sequence encoding the p47K protein or the p12K protein is present per plasmid set employed.

6. The expression system as claimed in one or more of the preceding claims,
characterized in that

the nucleic acid sequences encoding the nitrile hydratase subunits are derived from rhodococcus strains.

7. The expression system as claimed in one or more of the preceding claims,
characterized in that
the nucleic acid sequences encoding the nitrile hydratase subunits are used in a form in which they are modified in accordance with the *E. coli* codon usage.

8. The expression system as claimed in one or more of the preceding claims,
characterized in that
the plasmids employed are those of the PET series.

9. A method for preparing nitrile hydratases using an expression system as claimed in one or more of claims 1 to 8.

10. A host organism which exhibits an expression system as claimed in one or more of claims 1 to 8.

11. A method for preparing optionally enantiomerically enriched (amino)carboxylic acids or (amino)carboxamides using a host organism as claimed in claim 10 or an expression system as claimed in one or more of claims 1 to 8.